REMARKS

Applicant has amended the claims and added new claims to further distinguish the cited prior art. Initially, Applicant respectfully but thoroughly disagrees with the Examiner's interpretation of Applicant's own Background of the Invention (BOI). As stated twice in Applicant's specification with respect to prior art Figure 2, drive 200 does *not* have an LSD (p.9, line 4; and p.10, line 2). The Examiner has wrongly interpreted interface 204 as an LSD (office action, page 2, paragraph 4), despite Applicant's specification clearly defining interface 204 as a common "SCSI bus or a Fibre channel" (p.9, lines 7-8).

To more readily distinguish the BOI, Applicant has amended Claim 1 to now require "an interface having an interface control adapted to interface the storage device controller with a host," in addition to a separate LSD. Claim 1 further requires the separate LSD to communicate "with the storage device controller, said lateral storage director is coupled with a communication link, and said lateral storage director has a capability of communicating with a lateral storage director of another storage device via said communication link." The addition of "an interface having an interface control" to Claim 1 readily distinguishes the BOI. Claim 1 is now in condition for allowance.

With the BOI primary reference effectively overcome, the rejections based on the BOI in combination with the secondary reference (*Swidler*) are moot. However, notwithstanding, Applicant emphasizes that Swidler is limited to an "automatically configurating storage array" that sequentially records a data stream on a series of storage devices. Col.5, lines 11-18. Note that the storage devices are *not* independently communicating with each other *separately* from a storage controller. Thus, as required by Claim 2, *Swidler's* storage devices (1) do not have

LSDs, and (2) do not have separate communications link addresses that are used to accept queries from the LSDs of other disk drives.

Claim 3 was rewritten to still further distinguish the Examiner's use of the BOI by requiring the LSD to include a data file table, and "the interface comprises one of a SCSI bus and a Fibre channel." This element in Claim 3 again emphasizes that the interface cannot be an LSD, as stated in Applicant's specification at page 9, lines 7-8. Claim 4 is distinguishable for the same reason as Claim 2, namely, that it is the LSD that "has the capability of determining the available storage space of the storage device" not the storage controller. Similarly, Claim 5 was rewritten to enhance the capabilities of the LSD to monitor multiple performance parameters, including data traffic balance, seek duty cycle, and predictive failure indicators.
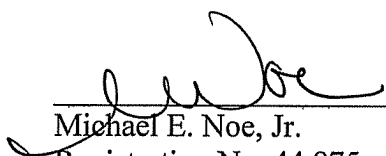
Applicant also has added new Claims 22-33 to focus on the unique architecture of the invention. For example, independent Claim 22 tracks the elements of Applicant's Figure 4, which is directed to an entire "computer system" comprising a storage controller, multiple storage devices, each of which has an LSD, a communications link for communicating between the storage controller and the storage devices, a separately claimed "host" for commanding the storage controller to pass data files to or from one or more of the plurality of storage devices via the communications link. In addition, Claim 22 requires the LSDs to "communicate directly with each other over the communications link without communication with the storage controller or host." This claims is allowable over the references for the same reasons described above for the preceding claims.

In addition, Claims 23-28 depend from Claim 22 but require additional elements such as in Claim 23 wherein each storage device has "its own storage device controller, and the LSDs are programs of computer commands usable by respective ones of the storage device controllers."

Page 2, paragraph 30. Claim 24 requires that "each of the LSDs are separately embodied as individual microprocessors that are physically separate from respective ones of the storage devices." Page 2, paragraph 30. Claims 25-28 essentially track the language of the preceding dependent claims and are likewise allowable. Finally, independent Claim 30 essentially combines Claims 22 and 25, while the remaining dependent Claims 31-33 track the foregoing dependent claims.

It is respectfully submitted that the application is in condition for allowance and favorable action is requested. The commissioner is hereby authorized to charge any additional fees that may be required to **Hitachi Global Storage Technologies' Deposit Account Number 50-2587.**

Respectfully submitted,

Michael E. Noe, Jr.
Registration No. 44,975
BRACEWELL & GIULIANI LLP
P.O. Box 61389
Houston, Texas 77208-1389
Telephone: 512.472.7800
Telecopier: 512.479.3923

ATTORNEY FOR APPLICANT